From: Jason Bishop
To: Microsoft ATR
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Subject: Microsoft Settlement

I would like to relate a story that a friend told me a year or so ago. I believe that the setting for this story was $\sim '97 +/- 1$ year.

At the time, he was working for Intel in a fledgling group for intel's first foray into consumer 3D graphics. At the time, there was really only one 3D graphics standard, SGI's OpenGL.

This story became especially fascinating, because at this same time, SGI independently was interested in extending the reach of OpenGL to the consumer PC. They contributed the software source code for the rendering engine and all library routines that make up OpenGL to Microsoft in the hopes that there might be a place for OpenGL in the desktop operating system.

At this same time, it appears that Microsoft was starting to notice that 3D graphics was becoming an "interesting market". I'm not going to second-guess Microsoft thinking, but I will relate the results. OpenGL source code was modified (40 lines) and renamed to Direct3D and then DirectX. Microsoft now had an API for the 3D gaming market, which of course, was incompatible with any other API, including OpenGL. This would not normally be a wise business decision, but this is Microsoft. Since they had a monopoly on the desktop, having a 3D gaming API which was incompatible with any other would turn out to be beneficial. Read on for gory details...

By this time, Intel's 3D chipset for the consumer market was almost ready. All that separated them from a shippable product was Microsoft certification. So Intel takes the new hardware to microsoft, where they learned that it failed certification. Upon inquiry, it was learned that Microsoft had changed the rules for hardware certification, namely that DirectX must be supported and not OpenGL. What makes this especially diabolical is one of the changes made to turn OpenGL into DirectX was a change to the algorithm which determines if a pixel is turned on. This routine is implemented in hardware. The result is that it is impossible to pass the hardware certification with hardware designed for OpenGL. Intel would have to redo their hardware, including producing the chips all over again. Intel would also have to support the new microsoft DirectX API if they wanted to be granted hardware compatability status.

So why does Intel care if they receive hardware compatibility status? Easy, because microsoft requires all PC manufactures to only include microsoft certified hardware in PC's they sell. In this way, Microsoft can control hardware companies. Of course, the reverse is true.

Normal rules don't seem to apply to microsoft, and the settlement should reflect this in my opinion.

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